Assumes 1 year shut-down of the R. Paul Smith EGU

Conversion factor from NO2 to N = 0.30435
Assume the units of the transfer function are kg-N to English Tons N Emissions

R. Paul Smith 1 year shut-down Reduction Estimate Deposited on Watershed

Total NOx "as NO2" = 167.211 tons/yr net emis

Total NOx as N = 50.89030 tons/yr net emission decrease

Decrease of N deposition on CB Watershed = 8,407 kg/yr net deposition decrease

18,533 lb/yr net deposition decrease

R. Paul Smith Shut-Down Reduction Estimate Delivered to Bay

Watershed average = 0.07124

18,533 lb/yr net deposition decrease time watershed average N attenuation = 0.07124 * 18,533 lb/yr =

R.Paul Smith Shut-Down Reduction Estimate to Tidal Bay

Total NOx as N = 50.8903 tons/yr net emission decrease

Decrease of N deposition on Tidal Bay = 628 kg/yr net deposition decrease

1,384 lb/yr net deposition decrease

TOTAL ESTIMATED DELIVERED N LOAD TO CB DUE TO 1 year Shut-Down of R. Paul Smith REDUCTION

1,320 lbs/yr decreased N load to the Bay from CB Watershed

1,384 lb/yr net deposition decrease to tidal Bay

2,705 lbs/yr decreased N load to the Bay from CB Watershed and Tidal Bay

sion decrease

1,320 lbs/yr decreased N load to the Bay from CB Watershed

State	Facility Name	Facility ID (OF	Year	NOx (tons)
MD	AES Warrior Run	10678	2012	580.018
MD	Brandon Shores	602	2012	4139.641
MD	C P Crane	1552	2012	1817.019
MD	Chalk Point	1571	2012	4689.398
MD	Dickerson	1572	2012	1488.249
MD	Gould Street	1553	2012	23.319
MD	Herbert A Wagner	1554	2012	1557.541
MD	Luke Paper Company	50282	2012	2775.008
MD	Morgantown	1573	2012	817.96
MD	Panda Brandywine	54832	2012	83.578
MD	Perryman	1556	2012	61.988
MD	R. Paul Smith Power Station	1570	2012	167.211
MD	Riverside	1559	2012	37.302
MD	Rock Springs Generating Facility	7835	2012	69.614
MD	Severstal Sparrows Point LLC	10485	2012	
MD	Vienna	1564	2012	9.708
MD	Westport	1560	2012	16.849

State	Facility Name	Facility ID (OF	Unit ID	Year	Owner
MD	R. Paul Smith Power Station	1570	11	1980	
MD	R. Paul Smith Power Station	1570	11	1985	
MD	R. Paul Smith Power Station	1570	11	1990	
MD	R. Paul Smith Power Station	1570	11	1995	
MD	R. Paul Smith Power Station	1570	11	1996	Potomac Edisc
MD	R. Paul Smith Power Station	1570	11	1997	Potomac Edisc
MD	R. Paul Smith Power Station	1570	11	1998	Potomac Edisc
MD	R. Paul Smith Power Station	1570	11	1999	Potomac Edisc
MD	R. Paul Smith Power Station	1570	11	2000	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2001	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2002	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2003	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2004	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2005	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2006	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2007	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2008	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2009	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2010	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2011	Allegheny Ener
MD	R. Paul Smith Power Station	1570	11	2012	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	1980	
MD	R. Paul Smith Power Station	1570	9	1985	
MD	R. Paul Smith Power Station	1570	9	1990	
MD	R. Paul Smith Power Station	1570	9	1995	
MD	R. Paul Smith Power Station	1570	9	1996	Potomac Edisc
MD	R. Paul Smith Power Station	1570	9	1997	Potomac Edisc
MD	R. Paul Smith Power Station	1570	9	1998	Potomac Edisc
MD	R. Paul Smith Power Station	1570	9	1999	Potomac Edisc
MD	R. Paul Smith Power Station	1570	9	2000	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2001	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2002	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2003	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2004	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2005	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2006	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2007	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2008	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2009	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2010	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2011	Allegheny Ener
MD	R. Paul Smith Power Station	1570	9	2012	Allegheny Ener

Operator	County	Source Catego	Facility Latituc	Facility Longit	NOx Phase	Unit Type	Fuel Type (Pri
	Washington	Electric Utility	39.595	-77.8269		Tangentially-fired	
	Washington	Electric Utility	39.595	-77.8269		Tangentially-fired	
	Washington	Electric Utility	39.595	-77.8269		Tangentially-fired	
	Washington	Electric Utility	39.595	-77.8269		Tangentially-fir	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Potomac Edisc ompany (Operator) (Ended Dec 31, 1999)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Operator) (Ended Dec 31, 2001)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Operator) (Ended Dec 31, 2002)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator) (Ended Aug 09, 2004) Allegheny Energy (Owner/Operator) (Started Aug 09, 2004)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator) FirstEnergy Generation Corporation (Owner) (Started Mar 25, 2011)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
Allegheny Ene (Owner/Operator) FirstEnergy Generation Corporation (Owner)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Tangentially-fir	Coal
	Washington	Electric Utility	39.595	-77.8269		Dry bottom wall-fired boiler	
	Washington	Electric Utility	39.595	-77.8269		Dry bottom wall-fired boiler	
	Washington	Electric Utility	39.595	-77.8269		Dry bottom wall-fired boiler	
	Washington	Electric Utility	39.595	-77.8269		Dry bottom wal	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Potomac Edisc ompany (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Potomac Edisc ompany (Operator) (Ended Dec 31, 1999)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Operator) (Ended Dec 31, 2001)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Operator) (Ended Dec 31, 2002)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator) (Ended Aug 09, 2004) Allegheny Energy (Owner/Operator) (Started Aug 09, 2004)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator) FirstEnergy Generation Corporation (Owner) (Started Mar 25, 2011)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal
Allegheny Ene (Owner/Operator) FirstEnergy Generation Corporation (Owner)	Washington	Electric Utility	39.595	-77.8269	Phase 1 Grou	Dry bottom wal	Coal

Fuel Type (Se
ary)

NOx Control(s)

Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
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Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA
Low NOx Burner Technology w/ Closed-coupled/Separated OFA

Low NOx Burner Technology (Dry Bottom only) (Began May 28, 2001)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)
Low NOx Burner Technology (Dry Bottom only)

Capacity Input (MMBtu/hr)

918
918
918
918
918
918
918
918
918
918

397
397
397
397
397
397
397
397
397
470
470